

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion is respectfully requested.

Claims 1-21 are currently pending in the application; Claims 1, 10 and 16 having been amended by way of this present amendment. Support for amended Claims 1, 10 and 16 can be found in the original specification, claims and drawings. Thus, no new matter is presented.

In the outstanding Official Action, Claims 1-21 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 1-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Shumaker ("AutoCAD and its Applications Advanced Release 14", the Goodheart-Wilcox Company, Inc. May 1998, hereinafter Shumaker) in view of Young (U.S. Patent No. 6,038,567, hereinafter Young).

Applicant acknowledge with appreciation the courtesy of the interview granted by Examiner Garcia-Otero on March 31, 2004 regarding the present application and co-pending Application Serial No. 09/984,374. During the interview, distinctions between the applied prior art and the claimed invention were discussed and proposed claim modifications were presented, which Examiner Garcia-Otero indicated would place the application in better condition to overcome the prior art of record. The substance of the interview is reflected in amended Claims 1, 10 and 16, as discussed below.

The outstanding Official Action rejects Claims 1-21 under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, language used in Claims 1, 4, 7, 10, 13 and 16 were cited as failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. As discussed in the interview, the instant specification claims priority to provisional Application Serial No. 60/128,560, which is entirely

incorporated therein by reference. The provisional application provides sufficient support for the terms used in the above-mentioned claims, which were cited in the Official Action as being indefinite. Furthermore, the provisional application provides support for the selection of subsequent symbols (or design parameters) by providing a detailed flow diagram.

Therefore, based on the support provided by the provisional application, it is believed that the 35 U.S.C. § 112, second paragraph, rejection of Claims 1-21 is now believed to be overcome.

In response to the rejection to Claims 1-21 under 35 U.S.C. § 103(a), and in light of the amendments made to the independent claims applicants respectfully traverse this rejection.

As discussed during the interview, the present invention is directed to a utility station automated design system and method that allows an engineer to design a unit substation or other utility station, and prepare a materials list and cost estimate for such a design. The computer-based tool includes a database holding both standard facility templates, as well as equipment symbols that may be applied to one another, as selected by user, via a graphical user interface to produce a 3-dimensional facility construction drawing set.

The user is presented with a series of options arranged to guide the user through the process of designing the unit substation, using the symbols and templates, as selected by the user. Moreover, the user is requested to select a predetermined standard substation architecture, and once selected, the user is presented with a series of options regarding which components are to be included within the standard configuration. Once selected, symbols associated with the selected components, are selected by the user from a database, and overlaid in layers with the assistance of the computer aided drawing package. The system also allows subsequent selection of symbols to be dictated by the previous symbol, or component selection, performed by the user.

Amended Claim 1 recites, *inter alia*, a system for designing a facility, comprising:  
a storage mechanism configured to store a plurality of symbols, the symbols representing  
components of the facility; and

“...a server coupled to the storage mechanism and  
configured to display a plurality of predefined layouts of the  
facility, the server being loaded with an association mechanism  
that applies the symbols to the predefined layouts to generate a  
facility construction drawing set, wherein  
said association mechanism is configured to recognize a  
selection of at least one of a component of the facility and a  
design parameter for the facility, and based on said selection  
define which of at least one of said plurality of symbols of the  
facility and design parameters are candidates for a subsequent  
selection.”

Shumaker describes a basic beginner level tutorial of how to customize AutoCAD,  
and how to use the software on a beginner level. Shumaker is a general user's guide and  
provides no specific details regarding any specific application of the AutoCAD software,  
especially not the claimed association mechanism. The Official Action relies heavily upon a  
portion of Shumaker, which describes specifically how to create a menu including user  
customized drawing symbols<sup>1</sup>, but does not describe or suggest the claimed association  
mechanism.

The Official Action also relies upon Young, which describes a method and system for  
propagating object properties in a desktop publishing program. Specifically, Young  
describes a publishing software package, in which a first predefined layout may be used to  
create newsletters, a second predefined layout may be used to create sales flyers, a third  
predefined layout may be used to create wedding invitations, and so forth.<sup>2</sup>

Applicants respectfully traverse the rejection of Claim 1 as being obvious over  
Shumaker in view of Young. The requirements for a *prima facie* case of obviousness are (1)

---

<sup>1</sup> Shumaker at page 486.

<sup>2</sup> Young at column 1, lines 18-22.

there must be some suggestion or motivation in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine the reference teachings, (2) there must be a reasonable expectation of success, and (3) the prior art reference must teach or suggest all the claim limitations. It is respectfully submitted that the outstanding Official Action fails to make a *prima facie* case of obviousness because there is no suggestion or motivation to modify the reference to provide the presently claimed invention. Furthermore, the references, even if combined, fail to teach or suggest all the claim limitations.

Amended Claim 1 recites an association mechanism that applies symbols to the predefined layouts to generate a facility construction drawing set. The Official Action asserts that language in Shumaker describes various general functionalities of the AutoCAD system, which read on the claimed association mechanism<sup>3</sup>. However, Shumaker fails to describe an association mechanism that applies the symbols to layouts to generate a facility construction drawing set. Shumaker simply describes that various symbols can be created and stored by the user to allow for easy access to the created symbols by way of a menu driven system.<sup>4</sup> This functionality does not apply the symbols to layouts to generate a facility construction drawing set, as recited in amended Claim 1.

Claim 1 also recites an association mechanism that is configured to recognize a selection of at least one of a component of the facility and a design parameter for the facility, and based on said selection define which of at least one of said plurality of symbols of the facility and design parameters are candidates for subsequent selection. As described above, Shumaker describes creating an image tile menu file listing for creating various storable menus that allow the user to select various options from the drop-down menu and insert

---

<sup>3</sup> Shumaker at page 3.

<sup>4</sup> Shumaker at page 486.

specific predefined components into a drawing. However, Shumaker does not describe that the selection of a component is based on, or limited by the previous selection of a facility component or symbol, as recited in amended Claim 1.

Furthermore, Shumaker fails to describe that a facility construction drawing set is generated as a result of the system. Amended Claim 1 recites that the system is able to use the generated symbols in conjunction with the predefined layouts to generate a facility construction drawing set. This construction drawing set constitutes a completed set of construction drawings that could be used to satisfactorily construct a facility. Shumaker describes the AutoCAD system, which is capable of being used to generate a set of construction drawings. However, Shumaker fails to teach or suggest that the AutoCAD system uses predefined layouts and user-selected symbols to generate a facility construction drawing set, as recited in amended Claim 1.

The Official Action admits that Shumaker does not disclose a plurality of predefined layouts. In order to cure the deficiency of Shumaker the Official Action turns Young as describing a plurality of predefined layouts.

However, Young is directed to a desktop publishing software program configured to generate various layouts in the creation of a published document. Shumaker fails to provide any suggestion or motivation to modify the reference so as to combine its teachings with the teachings of Young. Young is a system directed to desktop publishing, whereas Shumaker is describes an AutoCAD system used to customize the AutoCAD interface based on user preferences. It would not have been obvious to one of ordinary skill in the art to combine the teachings of Shumaker with the teachings of Young as the two clearly constitute non-analogous art.

Furthermore, Shumaker fails to provide any motivation or suggestion to modify his teachings with the teachings of Young. Shumaker describes how to customize the AutoCAD

system within the parameters of the AutoCAD software. Thus, modifying Shumaker by adding Young's capabilities the AutoCAD software would require modification beyond the scope of that conveyed by Shumaker. Therefore, Shumaker provides no motivation to add to it the capabilities disclosed by Young.

However, even if Shumaker were to be combined with Young the combination of the references fails to teach or suggest all of the claim limitations.

As discussed above, neither Shumaker nor Young teach an association mechanism configured to recognize a selection of at least a component of a facility and a design parameter for the facility and based on said selection define which of at least one of said plurality of symbols of the facility and design parameters are candidates for subsequent selection, as recited in amended Claim 1.

Accordingly, Applicant requests that the rejection of amended Claim 1 under 35 U.S.C. § 103(a) be withdrawn. For substantially the same reason as given with respect to amended Claim 1, it is also submitted that amended independent Claims 10 and 16 also patentably define over the prior art of record.

Additionally, as discussed in the interview, attached hereto is a declaration under 37 C.F.R. § 1.132 showing evidence of commercial success of the claimed invention. The declaration provides a nexus between the claimed invention and evidence of commercial success in the form of a latest licensing agreement between the assignee of the claimed invention and a licensee (General Electric) which purchased a product commensurate in scope with the claimed invention. This evidence provides a clear indication that the novel features of the claimed invention would not have been obvious over the prior art of record, especially in view of the sophistication of the licensee. Moreover, the claimed invention apparently is not obvious to General Electric, otherwise General Electric would have developed their own version of the claimed invention (which it has not).

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-23 is definite and patentably distinguishing over the prior art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



---

Bradley D. Lytle  
Attorney of Record  
Registration No. 40,073

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/03)  
GJM/SNS/ATH/sjh

I:\ATTY\ATH\PROSECUTION\16'S\165956US-AM.DOC